

Claims

- [c1] An error compensation method for an optical disk drive, comprising the steps of:
 - detecting an error signal showing the deviation of a focal point from a track of the optical disk drive;
 - generating a first sledge driving signal based on the error signal showing the deviation of the focal point;
 - generating a second sledge driving signal based on the magnitude of the error signal or the first sledge driving signal; and
 - intermittently driving a sledge of the optical disk drive by the second sledge driving signal to perform error compensation.
- [c2] The error compensation method for an optical disk drive in accordance with Claim 1, further comprising the step of detecting error signals between an actuator and the sledge of the optical disk drive.
- [c3] The error compensation method for an optical disk drive in accordance with Claim 1, wherein the first and second sledge driving signals alternately drive the sledge of the optical disk drive for error compensation.

- [c4] The error compensation method for an optical disk drive in accordance with Claim 1, wherein the second sledge driving signal is employed to drive the sledge of the optical disk drive when a clock signal is at high level.
- [c5] The error compensation method for an optical disk drive in accordance with Claim 1, further comprising the step of filtering the error signal smaller than a preset threshold value.
- [c6] The error compensation method for an optical disk drive in accordance with Claim 1, wherein the magnitude of the second sledge driving signal is proportional to that of the error signal or the first sledge driving signal.
- [c7] The error compensation method for an optical disk drive in accordance with Claim 1, further comprising the step of dividing the error signal or the first sledge driving signal into segments based on magnitude thereof, wherein the second sledge driving signal generated from the error signal or the first sledge driving signal in the same segment has the same voltage.
- [c8] An error compensation apparatus for an optical disk drive, comprising:
 - a photo detection integrated circuit for detecting a reflection signal of an optical pickup head of the optical

disk drive;

a signal generator for generating at least one error signal based on the reflection signal, wherein the at least one error signal comprises an error signal showing the deviation of a focal point from a track of the optical disk drive;

a servo controller for generating a first sledge driving signal based on the error signal showing the deviation of the focal point; and

a microprocessor for generating a second sledge driving signal based on the magnitude(s) of the signal(s) selected from the group of the first sledge driving signal and the error signal and for controlling the second sledge driving signal to intermittently drive a sledge of the optical disk drive.

- [c9] The error compensation apparatus for an optical disk drive in accordance with Claim 8, further comprising a clock generator for generating a clock signal, wherein the microprocessor outputs the second sledge driving signal when the clock signal is at high level.
- [c10] The error compensation apparatus for an optical disk drive in accordance with Claim 8, further comprising a switch for intermittently transmitting the second sledge driving signal to the sledge of the optical disk drive.

[c11] The error compensation apparatus for an optical disk drive in accordance with Claim 8, wherein the error signal further comprises an error signal between an actuator and the sledge of the optical disk drive.